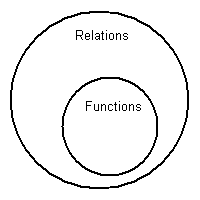
**Relation:**

**Function:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

**Domain:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Range:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



***Note from the diagram:***

**Ex 1: Determine whether each set of ordered pairs is a function. Describe the domain and range for each.**

**a.** {(3, 4), (3, 6), (5, 14), (7, 14) } **b.** { (4, 12), (5, 18), (7, 12), (8, 19) }

Function/Relation? Function/Relation?

Domain: Domain:

Range: Range:

**c.** {(1, 1), (2, 1), (3, 1), (4, 1) } **d.** { (1, 4), (1, 5), (1, 6), (1, 7) }

Function/Relation? Function/Relation?

Domain: Domain:

Range: Range:

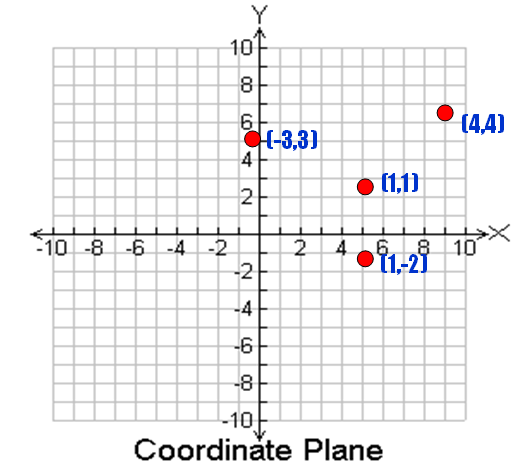
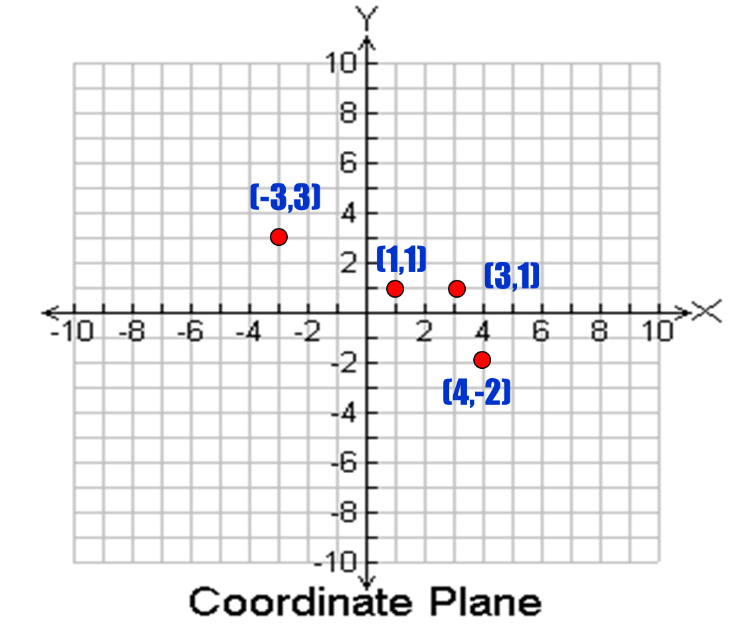
**Vertical Line Test:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

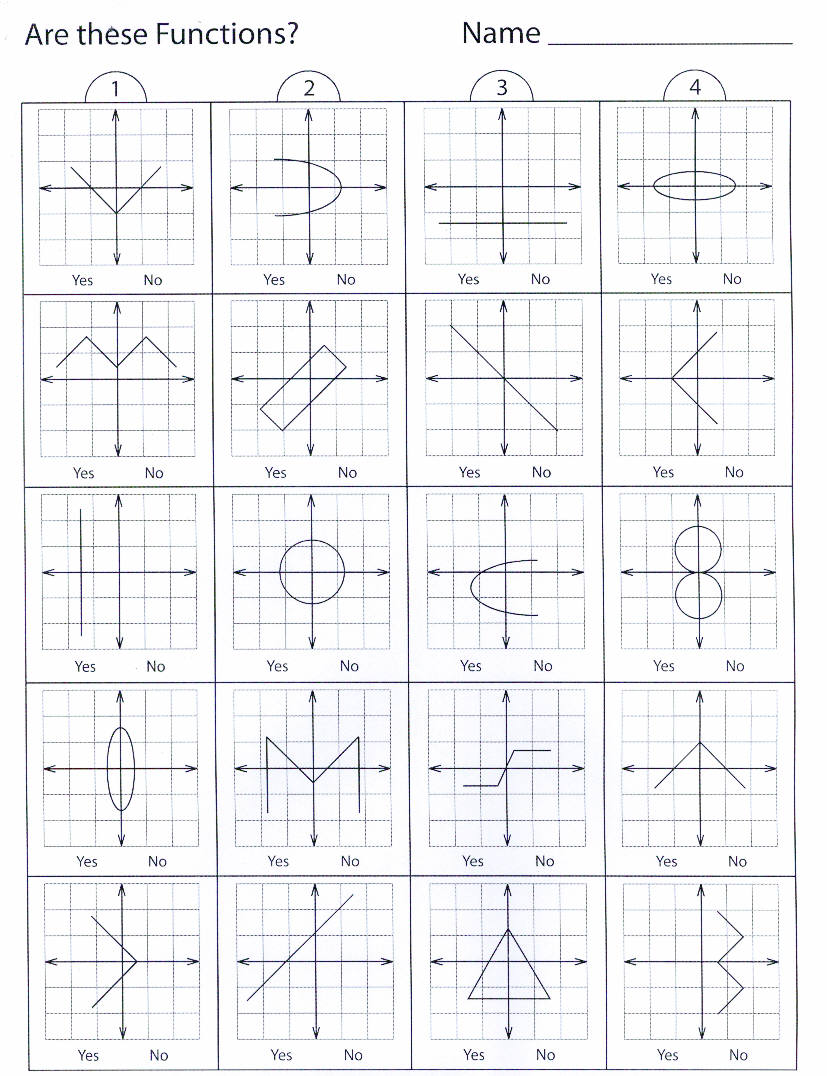
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**In other words: Points cannot be stacked, x’s cannot be repeated**

**Examples:** Use the vertical line test to visually check if the we have just a relation or a function.

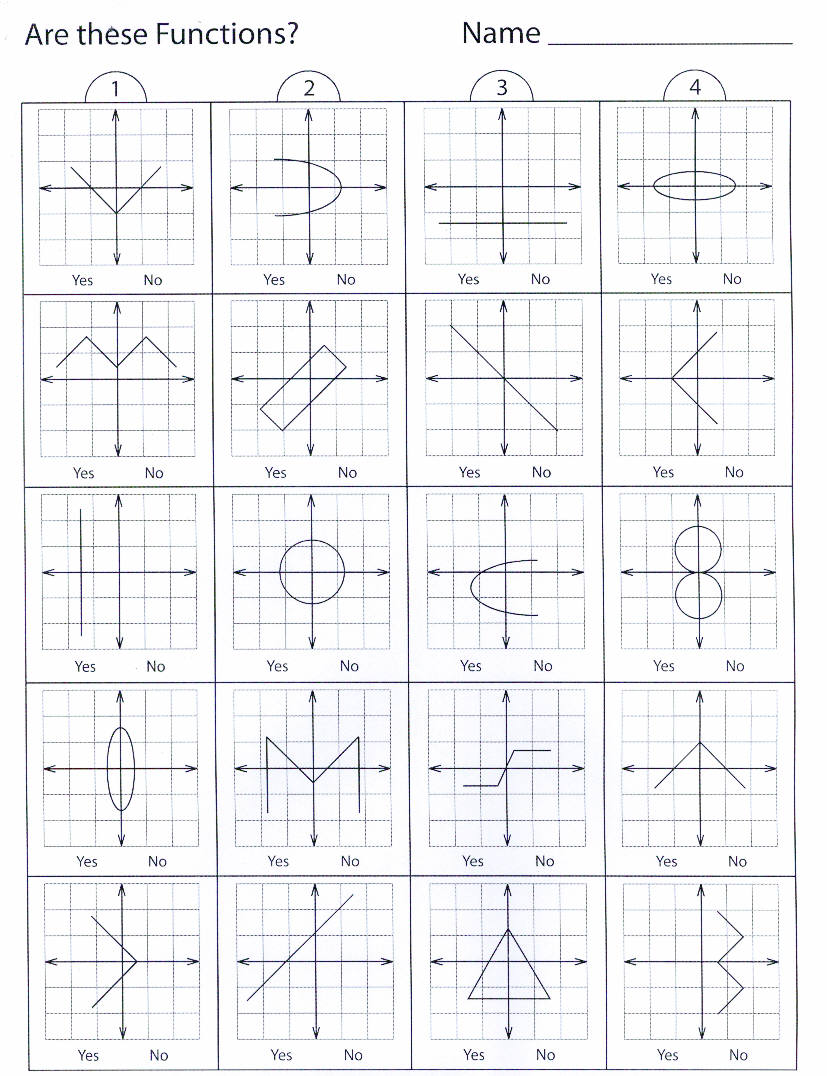
1) 2)

**Function?:** Yes No **Function?:** Yes No

****

3)

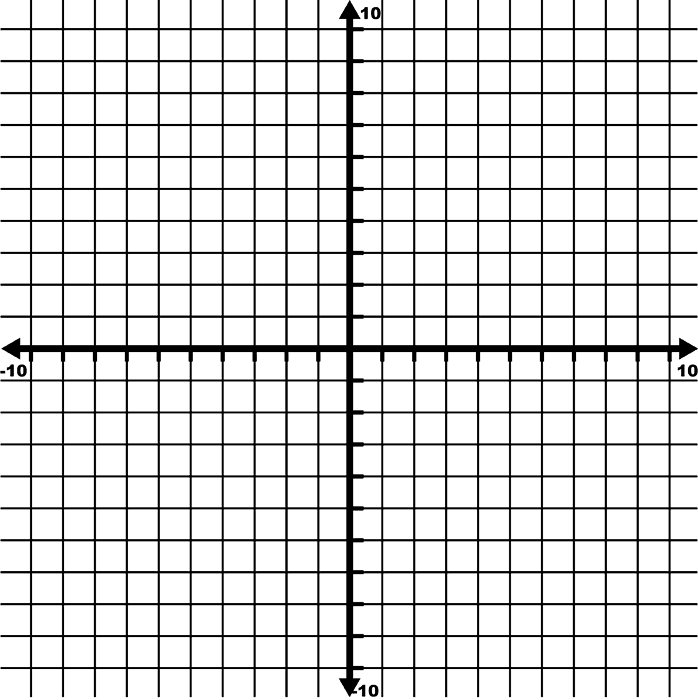
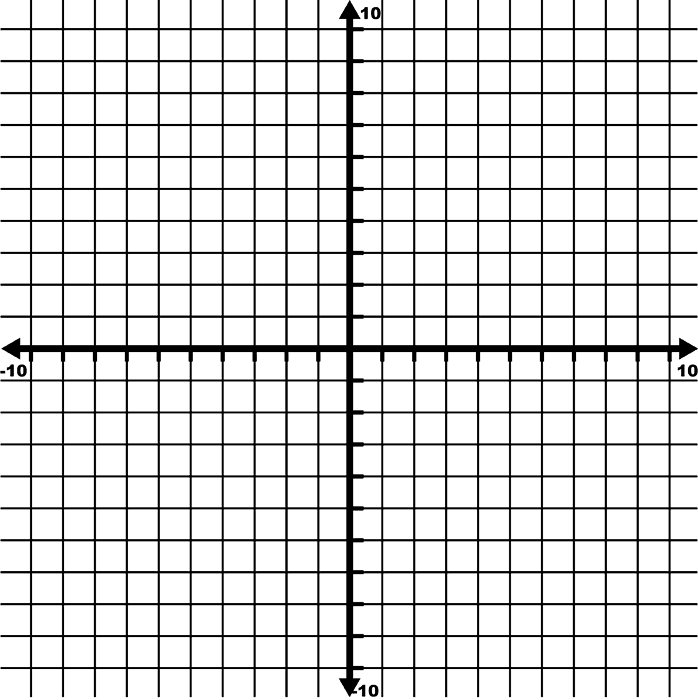
**Try These:** Use the vertical line test to visually check if each graph represents a function



1)

2) Determine whether the relation is a function by graphing the points on the coordinate plane.

a)  b)



Yes No Yes No

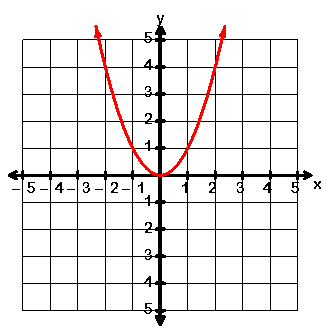
**Using a graph to determine the domain & range**

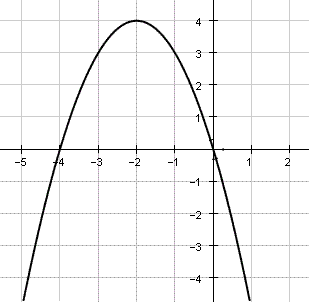
The find the domain:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The find the range:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Closed circle:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Open circle:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

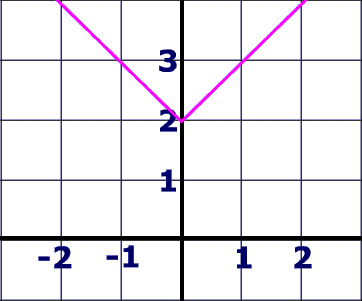
**Examples:**



A. B.

Domain: Domain:

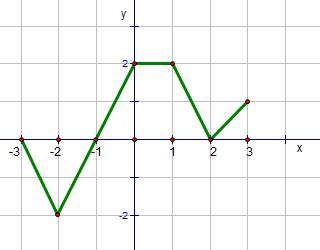
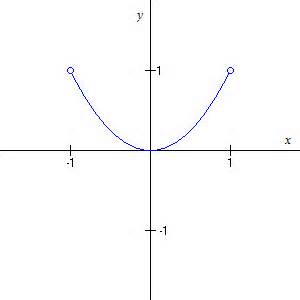
Range: Range:



C. D.

Domain: Domain:

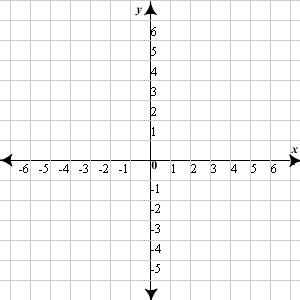
Range: Range:

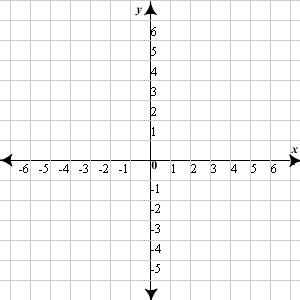


E. F.

Domain: Domain:

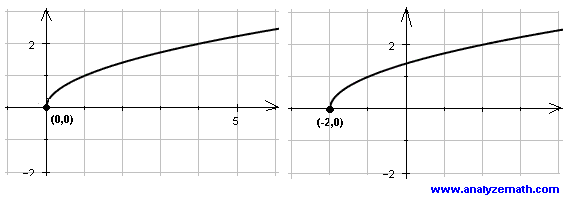
Range: Range:

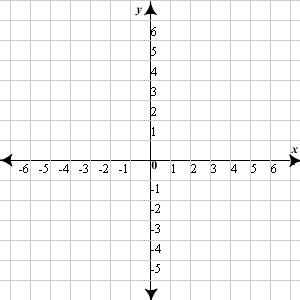


G. H.

Domain: Domain:

Range: Range: \_\_\_\_\_\_





J. K.

Domain: Domain:

Range: Range: